

*The Sacramento Valley*  
Water Management Agreement

PREPARED FOR

March 1, 2002

**Consolidated Water Use Efficiency 2002 PSP  
Proposal Part One:  
A. Project Information Form**

1. Applying for (select one): ☐ (a) Prop 13 Urban Water Conservation Capital Outlay Grant  
☐ (b) Prop 13 Agricultural Water Conservation Capital Outlay Feasibility Study Grant  
☒ (c) DWR Water Use Efficiency Project
2. Principal applicant (Organization or affiliation): Reclamation District 108
3. Project Title: BWMP Sub-basin Level Water Measurement
4. Person authorized to sign and submit proposal:
- |                 |                                      |
|-----------------|--------------------------------------|
| Name, title     | <u>Luther Hintz, General Manager</u> |
| Mailing address | <u>P.O. Box 50, Grimes, CA 95950</u> |
| Telephone       | <u>(530) 437-2221</u>                |
| Fax.            | <u>(530) 437-2248</u>                |
| E-mail          | <u>luhintz@colusanet.com</u>         |
5. Contact person (if different):
- |                  |         |
|------------------|---------|
| Name, title.     | <u></u> |
| Mailing address. | <u></u> |
| Telephone        | <u></u> |
| Fax.             | <u></u> |
| E-mail           | <u></u> |
6. Funds requested (dollar amount): \$7.556 million
7. Applicant funds pledged (dollar amount): --
8. Total project costs (dollar amount): \$7.656 million
9. Estimated total quantifiable project benefits (dollar amount): To be determined by feasibility study
- Percentage of benefit to be accrued by applicant: To be determined by feasibility study
- Percentage of benefit to be accrued by CALFED or others: To be determined by feasibility study

**Consolidated Water Use Efficiency 2002 PSP  
Proposal Part One:  
A. Project Information Form (continued)**

10. Estimated annual amount of water to be saved (acre-feet): To be determined by feasibility study
- Estimated total amount of water to be saved (acre-feet): To be determined by feasibility study
- Over \_\_\_\_ years
- Estimated benefits to be realized in terms of water quality, instream flow, other: To be determined by feasibility study
11. Duration of project (month/year to month/year): Feasibility study: 1 year
12. State Assembly District where the project is to be conducted: 2
13. State Senate District where the project is to be conducted: 4
14. Congressional district(s) where the project is to be conducted: 2 and 4
15. County where the project is to be conducted: Shasta, Glenn, Colusa, Yolo, Sutter, Butte and Sacramento counties
16. Date most recent Urban Water Management Plan submitted to the Department of Water Resources: N/A
17. Type of applicant (select one):  
Prop 13 Urban Grants and Prop 13  
Agricultural Feasibility Study Grants:
- ☐ (a) city  
☐ (b) county  
☐ (c) city and county  
☐ (d) joint power authority  
☒ (e) other political subdivision of the State, including public water district  
☐ (f) incorporated mutual water company
- DWR WUE Projects: the above entities (a) through (f) or:
- ☐ (g) investor-owned utility  
☐ (h) non-profit organization  
☐ (i) tribe  
☐ (j) university  
☐ (k) state agency  
☐ (l) federal agency
18. Project focus:
- ☒ (a) agricultural  
☐ (b) urban

**Consolidated Water Use Efficiency 2002 PSP  
Proposal Part One:  
A. Project Information Form (continued)**

19. Project type (select one):  
Prop 13 Urban Grant or Prop 13  
Agricultural Feasibility Study Grant  
capital outlay project related to:

- ☐ (a) implementation of Urban Best Management Practices
- ☐ (b) implementation of Agricultural Efficient Water Management Practices
- ☐ (c) implementation of Quantifiable Objectives (include QO number(s))
- 

☐ (d) other (specify)

---

DWR WUE Project related to:

- ☐ (e) implementation of Urban Best Management Practices
- ☒ (f) implementation of Agricultural Efficient Water Management Practices
- ☐ (g) implementation of Quantifiable Objectives (include QO number(s))
- ☐ (h) innovative projects (initial investigation of new technologies, methodologies, approaches, or institutional frameworks)
- ☐ (i) research or pilot projects
- ☐ (j) education or public information programs
- ☐ (k) other (specify)
- 

20. Do the actions in this proposal involve physical changes in land use, or potential future changes in land use?

- ☐ (a) yes
- ☒ (b) no

If yes, the applicant must complete the CALFED If yes, the applicant must complete the CAL PSP Land Use Checklist found at [http://calfed.water.ca.gov/environmental\\_docs.htm](http://calfed.water.ca.gov/environmental_docs.htm) and submit it with the proposal.

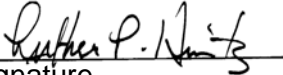
**Consolidated Water Use Efficiency 2002 PSP**  
**Proposal Part One:**  
**B. Signature Page**

By signing below, the official declares the following:

The truthfulness of all representations in the proposal;

The individual signing the form is authorized to submit the proposal on behalf of the applicant; and

The individual signing the form read and understood the conflict of interest and confidentiality section and waives any and all rights to privacy and confidentiality of the proposal on behalf of the applicant.

—  
  
Signature

Luther Hintz,  
General Manager  
Name and title

2-28-02  
Date

# Proposal Part Two

---

## Project Summary

The Sub-basin Level Water Measurement Program is intended to facilitate improved water management at a sub-basin level. Currently, water management and measurement occur primarily at a district level throughout the Sacramento Valley. Sub-basin water management would help optimize the efficient use of surface water and groundwater supplies and achieve the appropriate level of drain and return flow water use between water users within a given sub-basin.

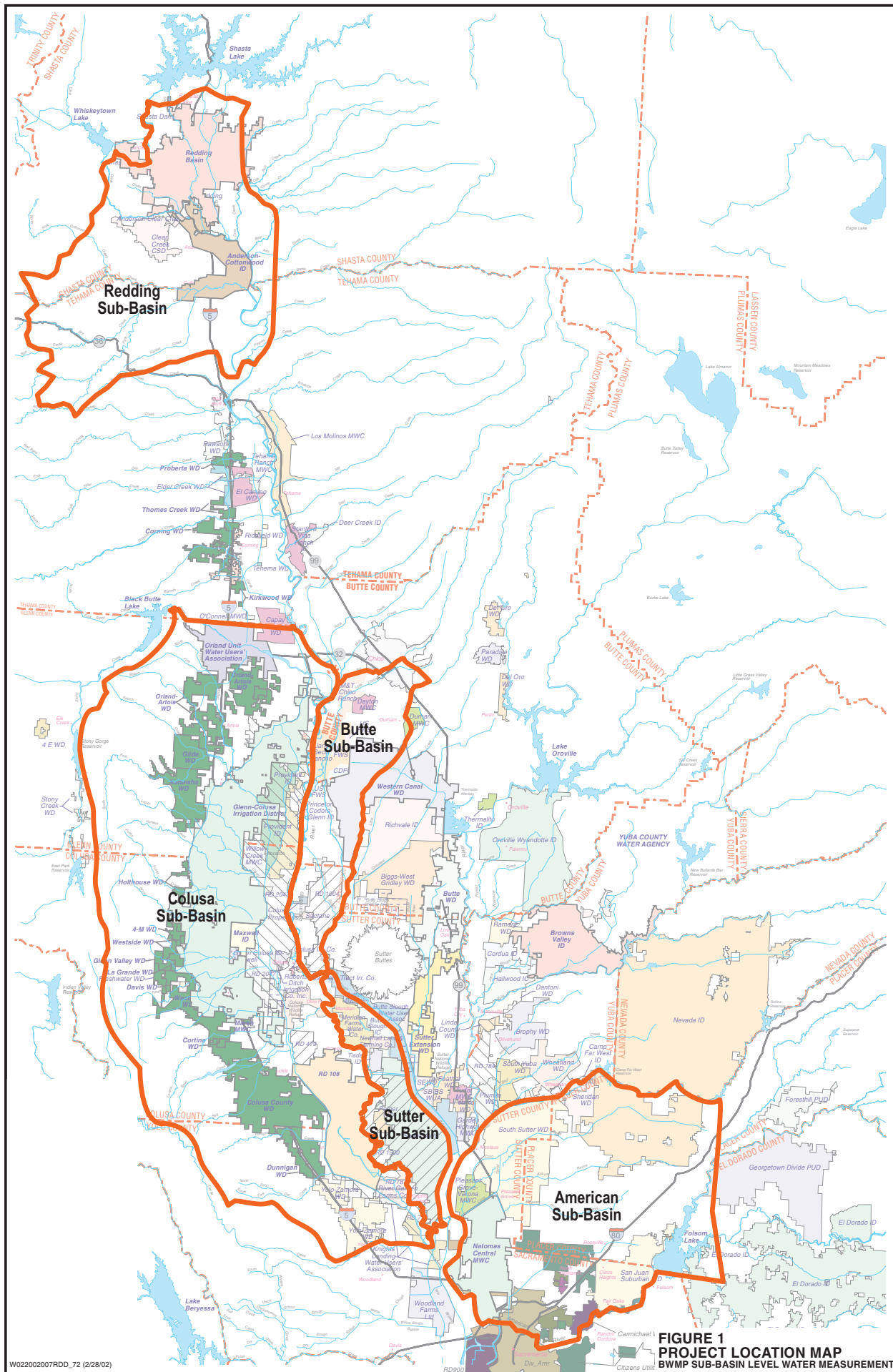
Management at this level requires that water inflows and outflows be tracked and quantified. Currently, measurement capabilities do not exist at the locations necessary to support such tracking at a sub-basin level. The objectives of this proposal are to identify the necessary study/design/environmental documentation, selection of measurement locations, and construction level of effort and to implement a water measurement program capable of providing real-time measurement for the following sub-basins:

- Redding Sub-basin (Anderson-Cottonwood Irrigation District)
- Colusa Sub-basin (Reclamation District 108, Glenn-Colusa Irrigation District, Princeton-Codora-Glenn Irrigation District, Provident Irrigation District, Maxwell Irrigation District, Colusa Drain Mutual Water Company, and Tehama-Colusa Canal Authority)
- Sutter Sub-basin (Sutter Mutual Water Company, Pelger Mutual Water Company, Meridian Farms Mutual Water Company, and Tisdale Irrigation District)
- Butte Sub-basin (Reclamation District 1004, M&T Chico Ranch)
- American Sub-basin (Natomas Central Mutual Water Company)

Figure 1 shows the locations of these sub-basins.

Water management at a sub-basin level is recommended in the Sacramento River Basin-wide Management Plan (BWMP) as a beneficial method of assisting in improving water supply reliability, water quality, and maximizing environmental benefits, including reducing river diversions during critical periods to support fishery and wildlife resources. The BWMP as developed by the Settlement Contractors in cooperation with the U.S. Bureau of Reclamation and California Department of Water Resources. **The ability to measure inflow and outflow at this hydrologic level contributes toward achieving CALFED Quantifiable Objectives 6, 13, 20, 24, 27, 30, 35, 57, and 65 as well as Priority Outcomes 24 and 29.**

The sub-basin water measurement program is divided into three phases: feasibility study, design, and construction. The total program is estimated to cost approximately \$7.6 million. The exact cost for design and construction depends on the results of the feasibility study and final designs. The districts participating in the BWMP are requesting a DWR Water Use Efficiency Project Grant for this project. The feasibility study, which will determine the



**FIGURE 1**  
PROJECT LOCATION MAP  
BWP SUB-BASIN LEVEL WATER MEASUREMENT

optimal hydrologic locations and the number of required measurement devices. The feasibility study is in progress and was partially funded in 2001 by the CALFED Water Use Efficiency Program.

## **A. Scope of Work: Relevance and Importance**

### **1. Nature, Scope, and Objectives**

The program would provide flow measuring devices in each sub-basin covered under this proposal, including the Redding, Colusa, Butte, Sutter, and American sub-basins. These sub-basins generally correspond to CALFED Sub-regions 1, 3, 4, and 7.

The scope of this program includes extending flow measurement capability to the sub-basin level. Currently, water management and measurement occur primarily at the district level throughout the Sacramento Valley. This would help to optimize the efficient use of surface-water and groundwater supplies and achieve the appropriate level of drain and return flow water use between water users located within a given sub-basin. Management at this level requires that sub-basin inflows and outflows be tracked and quantified.

The objectives of this proposal are to identify the necessary study/design/environmental documentation, selection of measurement locations, and construction level of effort and to implement a water measurement program capable of providing real-time measurement for the sub-basins included in the BWMP and identified herein.

### **2. Critical Local, Regional, Bay-Delta, State, or Federal Water Issues**

#### **Sacramento Valley Water Management Agreement**

The proposed project was identified in the Short-term Workplan developed as part of the Sacramento Valley Water Management Agreement (Agreement). This unprecedented agreement was developed by Sacramento Valley water users, export interests, DWR, and Reclamation as an alternative to a potentially contentious process within Phase 8 of the State Water Resources Control Board (SWRCB) Bay-Delta Water Rights Hearings. The intent of the Agreement is to establish a framework to meet water supply, water quality, and environmental needs through a cooperative project development process. Each of the water system improvement projects evaluated under the Agreement, including the project described below, would provide benefits toward achieving at least one of four quantifiable objectives:

1. decrease provide flow to improve aquatic ecosystem conditions,
2. nonproductive evapotranspiration (ET),
3. provide long-term diversion flexibility to increase the water supply for beneficial uses,
4. and reduce salinity to enhance and maintain beneficial uses of water.

#### **Basin and Local Water Management Initiatives**

The proposed program is an outgrowth of the ongoing BWMP and supports the objectives of the BWMP, including providing sustainable water supplies across the Sacramento River basin, maximizing environmental benefits, and enhancing partnership opportunities.

Within the Redding Sub-basin, the Anderson-Cottonwood Irrigation District (ACID) is one of 14 water purveyors working with the Redding Area Water Council on a regional water



resources planning effort that began in 1996. In Phase 1, current land uses and associated water demands were quantified for each purveyor. Current efforts are geared toward defining the core elements of a plan for regional management of the Redding Basin's water resources through the year 2030. This proposal is consistent with the core elements of the regional plan because it will help quantify water inflow and outflow at key locations within the Redding Sub-basin and assist in evaluating future water management options.

Within the Colusa Sub-basin, water users began coordinated sub-basin management through the transfer of water between water users. This is possible because of the flexibility in project water transfers provided by the Central Valley Project Improvement Act (CVPIA). This sub-basin management has resulted in improved community relations and communication without increased consumptive use of water within the sub-basin. This management will assist in sustaining long-term production agriculture and is based on the collective knowledge of historical flows and water needs within the sub-basin. This proposal will allow these water user to take another major step in optimizing water management and ensuring sustainable agriculture in the Sacramento Valley.

Within the American Sub-basin, sub-basin management efforts have begun through the Sacramento Area Water Forum (of which Natomas Central Mutual Water Company is a member). Various potential projects are being investigated by the Sacramento North Area Groundwater Management Authority and the American River Basin Cooperating Agencies. The proposed water measurement program complements these ongoing efforts.

### **Central Valley Project Improvement Act**

The CVPIA calls for development of water conservation criteria “with the purpose of promoting the highest level of water use efficiency reasonably achievable by project contractors.”

### **CALFED Bay-Delta Program**

CALFED's Water Use Efficiency Program is intended to help ensure that California's water is used efficiently and results in multiple benefits. Many CALFED agencies, such as DWR, Reclamation, and the Natural Resource Conservation Service, also are implementing ongoing water management programs. The Water Use Efficiency Program focuses on improvements in local water use management and efficiency, including the agricultural water use sector. .

**The ability to measure inflow and outflow at this hydrologic level contributes toward achieving CALFED Quantifiable Objectives 6, 13, 20, 24, 27, 30, 35, 57, and 65 as well as Priority Outcomes 24 and 29.**

### **Need for Project**

The local, regional, state, and federal water management programs and policies discussed above all have agricultural water conservation elements. A keystone of all of these programs and policies is the ability to measure water use as a prerequisite to managing water supplies and measuring the success of any conservation program. The CALFED Water Use Efficiency Program has “quantifiable objectives” for improvements in water management that can be measured or otherwise tracked to ensure that such improvements occur. This proposal represents an initiative by the participants of the BWMP to develop the capability to measure flows into, out of, and within five sub-basins to facilitate improved management.

## B. Scope of Work: Technical/Scientific Merit, Feasibility, Monitoring, and Assessment

### 1. Methods, Procedures, and Facilities

#### Phase/Task 1: Select and Determine Feasibility of Measurement Locations

Initial effort will focus on collecting and reviewing existing information to assist in identifying the appropriate hydrologic locations to install measurement facilities within each of the sub-basins. Meetings will be held with program participants/sub-basin coordinators to ensure a consistent approach and sharing of information across sub-basins. Meetings will be held with the primary CVP water users within each sub-basin, including Settlement Contractors, Water Service Contractors, and USFWS refuge managers that use CVP supplies, to assist in developing appropriate measurement locations. This task will focus on existing knowledge of potential locations, including specific district knowledge and studies, existing and likely future land use and ownership, and associated facilities and infrastructure that may be required to support measurement at each location.

This task also will include additional investigation (including site reviews) to ensure the feasibility of all locations. Selection factors will include: hydrology (known or determined appropriate location to measure sub-basin inflow or outflow), existing/future land use, ownership, accessibility, and minimizing environmental impacts. The following summarizes some of the known potential locations for each sub-basin:

**Redding Sub-basin.** Anderson Creek, Crowley Gulch, NF Cottonwood Creek, Cottonwood Creek, Battle Creek, Bear Creek, Cow Creek

**Colusa Sub-basin:** Tehama-Colusa Canal (at Stony Creek), Willow Creek, Logan Creek, Boundurant, Colusa Drain (at Maxwell Diversion, Highway 20, Davis Weir, Tule Road, Knights Landing), Northeast Drain, Stone Corral Creek, Freshwater/Salt Creek, Powell Slough, Riggs Pumping Plant, Rough and Ready Pumping Plant, El Dorado Pumping Plant, Knights Landing Ridge Cut

**Sutter Sub-basin: (south)** RD 1500 Main Drain Pumping Facilities (Kamack), SMWC Main Canal (below Tisdale Pumping Plant), SMWC West Canal (below Tisdale Pumping Plant) SMWC East Canal, SMWC Central Canal; **(north)** RD 70 Pumping Plant, RD 1660 Main Pumping Plant, #2, #3, and #4), miscellaneous locations.

**Butte Sub-basin:** Big Chico Creek, Little Dry Creek, Cherokee Canal, Drumheller Slough, Angel Slough, Howard Slough

**American Sub-basin:** Natomas Cross Canal, RD 1000 Pumping plant, miscellaneous locations

The culmination of this task (and accordingly Phase 1) will be documentation and selection of appropriate and feasible water measurement locations and feasibility-level facility recommendations to support Phase 2, Design of Measurement Facilities/Environmental Compliance. The document will be prepared in cooperation with the water users identified above and circulated for final review among this group to obtain approval from all participants.

## **Phase 2 - Tasks 2A and 2B: Design of Measurement Facilities and Environmental Compliance.**

Facility types (e.g., weir structures) will be evaluated and designed based on site-specific hydraulic and site conditions and sized appropriately for existing and projected in-channel flows. Hydraulic modeling will be conducted for the larger facilities, where necessary, to support facility sizing. Construction specifications will be developed for each facility. The proposed level of effort and estimated design cost are based on the assumption that all facilities listed above for each sub-basin are selected and subsequently designed..

This task will include preparation of an environmental document (anticipated to be an Environmental Assessment/Initial Study [EA/IS]) in accordance with NEPA and CEQA, respectively, and acquisition of all necessary permits.

## **Phase 3 - Tasks 3A and 3B: Construction/Installation of Measurement Facilities and Construction Management and Inspection**

These tasks will include the construction/installation of all measurement facilities and construction management and inspection. It is assumed that identified measurement facilities will be constructed; therefore, this proposal reflects costs associated with installing these devices. The attached proposed level of effort and estimate for design cost are based on the assumption that all facilities listed above under Phase 1 for each sub-basin are selected and subsequently designed.

### **Other Tasks**

**Task 4 - Operation and Maintenance.** Operation and maintenance (O&M) of all devices is proposed to initially be accomplished by the district within (or adjacent to) which a device is located. O&M is considered in this proposal to be an in-kind, cost-sharing service. Future O&M may be performed by a sub-basin management entity if such an entity is determined to be necessary to support other sub-basin-wide management efforts.

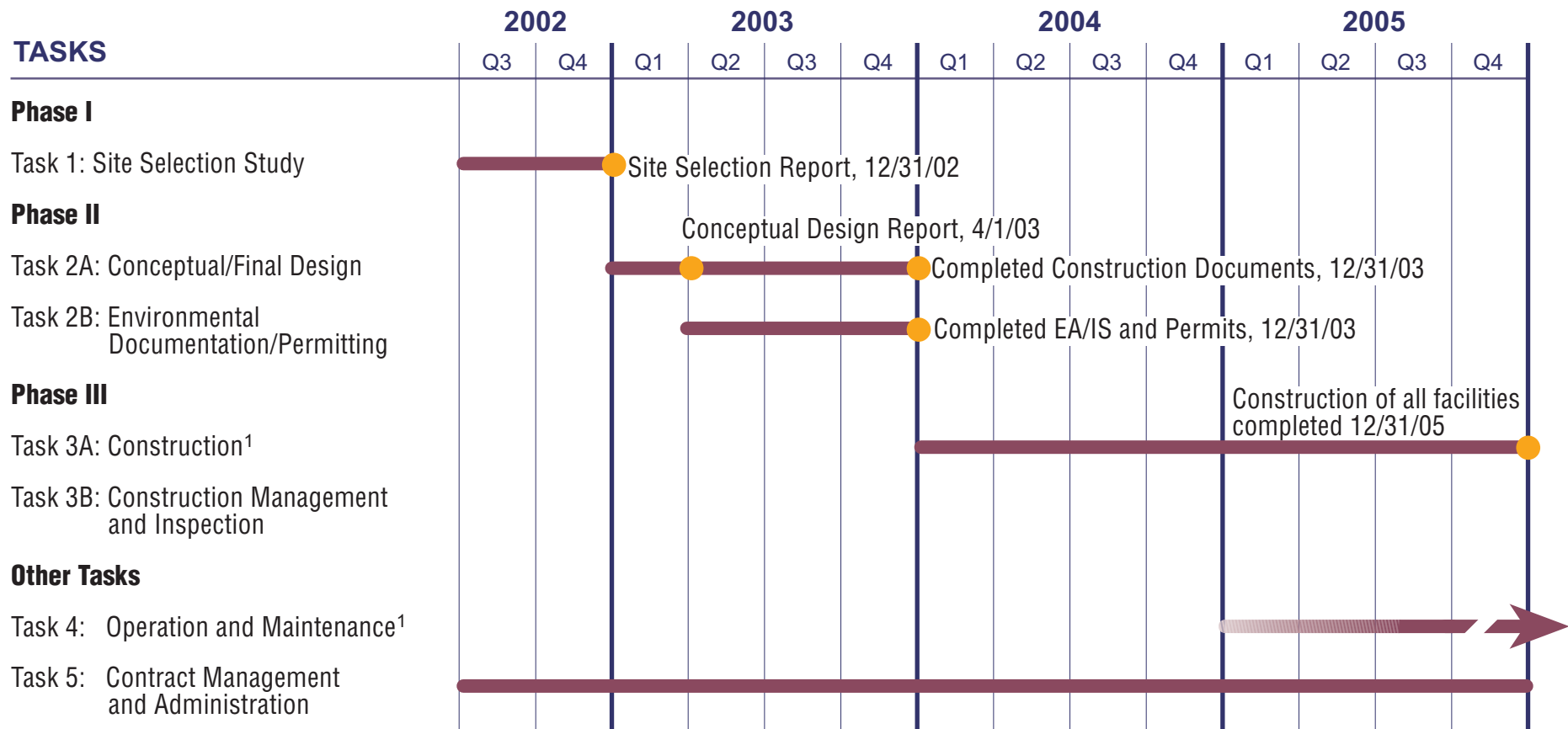
**Task 5 - Contract Management and Administration.** This task, to be undertaken by Luther Hintz (General Manager, RD 108) and the sub-basin coordinators, incorporates management of program costs and schedule, administering grant funds, developing work plans, coordinating with other entities and agencies, and overseeing activities of the program team.

### **Task List and Schedule**

Figure 2 shows the Project Timeline. Figure 3 shows costs distributed through the project duration.

## **2. Monitoring and Assessment**

The proposed program includes the operation and maintenance of each facility. Information provided by each measuring facility will be made available to all water purveyors within each sub-basin, as well as to Reclamation and DWR. The appropriate level and frequency of flow measurement data collection will be determined in association with those entities within each sub-basin, as well as with Reclamation and DWR.



<sup>1</sup>Completion date is for all facilities; some facilities can be installed and subsequently operated prior to overall completion date.

**FIGURE 2**  
**PROJECT TIMELINE**  
BWMP SUB-BASIN LEVEL WATER MEASUREMENT

TASKS	Costs (x 1,000)	2002		2003				2004				2005			
		Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Phase I</b>															
Task 1: Site Selection Study	250	125	125												
<b>Phase II</b>															
Task 2A: Conceptual/Final Design	820			205	205	205	205								
Task 2B: Environmental Documentation/Permitting	200			50	75	50	25								
<b>Phase III</b>															
Task 3A: Construction <sup>1</sup>	5,460							535	650	700	700	700	725	725	725
Task 3B: Construction Management and Inspection	800							100	100	100	100	100	100	100	100
<b>Other Tasks</b>															
Task 4: Operation and Maintenance <sup>2</sup>	n/a	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Task 5: Contract Management and Administration	126	9	9	9	9	9	9	9	9	9	9	9	9	9	9
	7,656	134	134	264	289	264	239	644	759	809	809	809	834	834	834

<sup>1</sup>Completion date is for all facilities; some facilities can be installed and subsequently operated prior to overall completion date.

<sup>2</sup>O & M funded by participating districts.

**FIGURE 3**  
**PROJECT EXPENSE SCHEDULE**  
BWMP SUB-BASIN LEVEL WATER MEASUREMENT

## C. Qualifications

### Project Manager

The proposed program would be managed by Luther Hintz, General Manager, Reclamation District 108. Mr. Hintz joined Reclamation District No. 108 as the General Manager on January 1, 1994. Prior to accepting the General Manager position with the District, he worked as a consulting engineer, specializing in water resource development with the firm of Bookman-Edmonston Engineering, Inc. During his 32-year tenure with Bookman-Edmonston, Mr. Hintz was the manager and principal engineer in conceptual planning, design, construction management and startup of large-scale irrigation distribution system projects in California, Arizona, and Utah.

Mr. Hintz has extensive experience in planning, construction and operation of major water facilities involving close coordination and cooperation with federal, State and local resource agencies. He is a graduate of the University of California, Davis, and is a registered professional engineer in California and several other western states.

### External Cooperators

The following four sub-basin coordinators (Mr. Hintz will also oversee the Colusa Sub-basin related activities) are cooperators in this project: **Redding Sub-basin** – Dee Swearingen (Manager – Anderson-Cottonwood Irrigation District), **Sutter Sub-basin** – Max Sakato (Manager – Sutter Mutual Water Company), **Butte Sub-basin** – Gary Bailey (Manager – Reclamation District 1004), **American Sub-basin** – Peter Hughes (Manager – Natomas Central Mutual Water Company).

## D. Benefits and Costs

### 1. Budget Justification

The estimated project cost is \$7,656,000, and is shown in Table 1.

Note that \$100,000 has already been funded through the CALFED Water Use Efficiency Program towards the feasibility study.

### 2. Cost Sharing

Cost-sharing is proposed for the entire implemented measurement program, but not the initial feasibility study. The share would be in the form of operation and maintenance (Task 4) of the new facilities in perpetuity and is assumed to be approximately 1 percent of the total estimated construction cost of \$5,460,000.

### 3. Benefits Summary

The principal outcomes of the program will be substantially increased ability to track water inflows and outflows to allow for the potential for decreased diversions from the Sacramento River during critical periods. Corresponding higher instream flows, which free up water for

**TABLE 1**  
Budget Summary

Item		Present Value (\$)	Requested Funds (\$)	Description and Justification
<i>(a)</i>	Direct Labor Hours	\$0	\$0	Not applicable.
<i>(b)</i>	Salaries	\$117,600	\$117,600	\$2,800/month for 42 months. Contract mgmt and admin. (Task 5)
<i>(c)</i>	Benefits	\$0	\$0	None included.
<i>(d)</i>	Travel	\$8,400	\$8,400	\$200/month for 42 months. (Task 5)
<i>(e)</i>	Supplies and Expendables	\$0	\$0	Provided for in (h) (construction costs).
<i>(f)</i>	Services or Consultants	\$2,070,000	\$1,970,000	Engineering services shall be provided by consultants. Initial stages of the study are underway and have been partially funded, but require additional funding to proceed. (Task 1, 2A, 2B, 3B)
<i>(g)</i>	Equipment	\$0	\$0	
	<b>Sub-total (a-g)</b>	<b>\$2,196,600</b>	<b>\$2,096,600</b>	
<i>(h)</i>	Other Direct Costs	\$5,460,000	\$5,460,000	Construction costs for measurement structures. Average cost estimated at approximately \$75,000 per structure. (Task 3A)
	<b>Sub-total (h)</b>	<b>\$5,460,000</b>	<b>\$5,460,000</b>	
<i>(i)</i>	Total Direct Cost	\$7,656,000	\$7,556,000	
<i>(j)</i>	Indirect Costs	\$0	\$0	Not applicable.
<i>(k)</i>	<b>Total Costs</b>	<b>\$7,656,000</b>	<b>\$7,556,000</b>	

other beneficial uses, would benefit all downstream users and improve aquatic ecosystem conditions for aquatic and terrestrial habitats. Measurement of inflows and outflows at the sub-basin level would promote efficient water management and operations that could assist in meeting local water demands, improving water quality, and reducing surface water diversions, thereby enhancing fish and wildlife habitat. The program would benefit all sub-basin water users by increasing the potential for reliability and flexibility of water deliveries. These are not quantifiable benefits, but the additional information provided by the proposed program is inherently beneficial to water management planning efforts at all levels.

### Water Supply

The project would not produce new water at the sub-basin level. The primary intention is the measurement of inflow-outflow of water at the sub-basin level toward management of each sub-basin across the valley. There may not be a direct increase in supply for water-short areas, but improved water management may allow increased water transfers to local water-short areas, such as TCCA member districts and out-of-basin users. Through improved management, additional water could become available to meet in-basin, and/or out-of-basin, and/or environmental needs.

### Water Management

The most significant benefit and predominant goal of the project is increased water use efficiency. The sub-basin-level water measurement of the Sacramento Valley would provide the inflow and outflow data required to substantially improve water management decisions.

### Environmental

As the Sacramento Valley's primary source of supply, the Sacramento River would be directly and most beneficially influenced by the efficient use of its water supply. Some environmental benefits that have been identified at this level of investigation include:

- **Sacramento-San Joaquin Delta**—A decrease in surface water diversions has the potential for increasing available seasonal inflows to the Delta
- **Aquatic/Riparian Habitat**—Improved in-stream flows would generate expected fisheries benefits, both in terms of water quality and flow requirements

### Water Quality Benefits

Water quality benefits of the project generally stem from the increased in-stream flows. Improvements to both temperature and constituent properties of the river would be the most probable results of the increased flows. These benefits would need to be evaluated and modeled on a regional basis to determine impacts on water quality in the Sacramento River and the Delta.

### Other Benefits

Improved measurement could support changing timing of river diversions to support meeting environmental or other needs. Also, by optimizing agricultural irrigation water supply management, water is potentially available for other beneficial uses in the Sacramento Basin and out-of-basin.



Non-quantifiable benefits include overall improved water management at a sub-basin level with associated potential decreases in diversions during critical periods as well as contributing toward meeting the quantifiable objectives and outcomes discussed above. The value of water that could be made available for other in-basin and out-of-basin uses could certainly exceed many millions of dollars.

#### **4. Assessment of Costs and Benefits**

The proposed flow measurement devices will provide the capability to more flexibly and efficiently manage the amount and timing of diversions. This will result in higher instream flows that would benefit all downstream users and improve aquatic ecosystem conditions. Because optimized management of agricultural irrigation water supplies makes more water potentially available for other beneficial uses, this program will benefit all Californians.

For a total of \$250,000 (\$100,000 requested from this grant program), the feasibility study will analyze the cost effectiveness of moving forward with the proposed \$7.6 million project to realize the above benefits.

### **E. Outreach, Community Involvement, and Acceptance**

#### **Project Outreach and Benefits**

The proposed program is an outgrowth of the ongoing BWMP. During the development of the BWMP, numerous meetings have been and continue to be held with Settlement Contractors, DWR, Reclamation, other water users (including the Tehama-Colusa Canal Authority) and environmental interest groups to solicit stakeholder input and disseminate information about the BWMP.

The project is an outgrowth of the Sacramento Valley Water Management Agreement. The ongoing process that resulted in the Agreement has a strong public outreach component to inform agencies, environmental and other interests, and the public on the Agreement. Numerous presentations have been made to the CALFED Management Team and associated staff, county supervisors in all affected counties, water districts and their customers, and other organizations and agencies, including the State Water Resources Control Board, Trust for Public Lands, The Bay Institute, U.S. Fish and Wildlife Service, Natural Heritage Institute, The Nature Conservancy, and the public. Additional meetings will occur as the planning and implementation process proceeds. No individual or organization has expressed formal opposition to the Agreement or the projects to be undertaken under the Agreement. The projects, including the one described here, have been summarized in a published “Short-term Workplan” prepared in conjunction with the Agreement.

Additionally, if they prove to be feasible and are selected for implementation, this and all other capital outlay projects associated with the Agreement will be subject to CEQA and NEPA documentation. The CEQA and NEPA statutes and implementing guidelines ensure that the public and all affected agencies will be fully informed of the project and its effects and receive meaningful opportunities to provide input and review and comment on the project through the CEQA and NEPA public review process.

The project does not directly involve training, employment, or capacity building, but through more efficient and flexible agricultural water supply management, it potentially makes more water available for beneficial uses. A better managed water supply will help sustain the gains being made in the northern California economy by accommodating growth in industry and agriculture, providing growth in employment opportunities in all economic sectors.

The planning effort associated with the Agreement provides a formal framework for disseminating project information. Feedback on benefits achieved through the management and conservation measures recommended in the Agreement will be made available to all Sacramento Valley water contractors, Reclamation, and DWR through the planning partnership. The participants are aware of the need to share this information to ensure successful water supply management throughout the Sacramento Valley.

### **Disseminating Information**

The intent of the proposed program is to increase the ability to measure water inflows and outflows and make this information available to all entities within each sub-basin, as well as to Reclamation and DWR. The availability of this information will allow for improved ability to track flows into and out of sub-basins and promote the benefits associated with managing supplies at a sub-basin level. All parties to this proposal are participants in the BWMP, which recommended sub-basin water measurement. The ongoing planning effort associated with the development of the BWMP provides a formal framework for disseminating inflow/outflow information.